

PROCEEDINGS OF LEARNED SOCIETIES.

ENTOMOLOGICAL SOCIETY.

March 1st, 1841.—W. W. Saunders, Esq., F.L.S., President, in the Chair.

Mr. Parry exhibited a variety of new *Coleoptera*, especially several fine *Cetoniidæ*, from New Holland.

Mr. Westwood exhibited dried specimens of a Chinese larva, from the back of the neck of each of which a slender fungus, twice as long as the body of the insect, had been produced. This insect, when thus attacked, is esteemed of great efficacy as a drug in China, where, from its very great rarity, it is only used by the emperor's physicians; and an extract from Du Halde's History of China was read, in which its virtues are elaborately detailed, being especially serviceable in cases of bodily debility, particularly when a small portion of it is boiled in the body of a duck. The Chinese philosophers consider it as a herb during the summer season, but as soon as winter appears it changes into a worm. It is named Hia Tsao Tong Tchong in Du Halde's Gen. Hist. of China done into English, 8vo, 1736, 4 vols., vol. iv. p. 41-42; the first two names meaning summer-herb, and the last two winter-worm. In Rees's Cyclopædia it is called Hiastaotomtchom; but its proper name (according to Mr. Reeves, who had forwarded a number of specimens to the Linnæan Society from Canton) is Hea Tsaon Taong Chung. It is brought to Canton tied up in small bundles, each containing about a dozen individuals, and where it is better known under the name of Ting Ching Hea Tsam, which seems but a transposition of the former name. The parasitic plant (which is analogous to that which infests the larvæ sent from New Zealand, of which notices have been brought before the Society on former occasions) is the *Clavaria Entomorphiza*.

Mr. Westwood also exhibited two remarkable moths from Assam, collected by Mr. Griffith, and forming part of Mr. R. H. Solly's collection, which had all the appearance of black species of the genus *Papilio* with red spots (*Epicopeia Polydora* and *Philenora*, W., in *Arcana Entomol.*, No. 2, pl. 5.).

A letter was read from Dr. Cantor, addressed to the Rev. F. W. Hope, from Singapore, dated May 21, 1840, giving an account of his proceedings and travels.

A communication was read from the Rev. F. W. Hope, relative to the formation of committees for undertaking the investigation of the entomology of various regions of the globe; but as he was not present, the consideration thereof was deferred until his return to England.

A letter was read, announcing that the next meeting of the Italian naturalists would be held at Florence.

The completion of Mr. Westwood's memoir on the Linnæan *Staphylinidæ* was read.

A memoir was also read, containing descriptions of the species of the Curculionideous genus *PACHYRHYNCHUS*, *Sch.*, collected by H.

Cuming, Esq., in the Philippine Islands. By G. R. Waterhouse, Esq., V.P.E.S.

Sp. 1. *Pachyrhynchus venustus*, W. *Niger, lævis; capite macula unidâ inter oculos, thorace maculis duabus suprâ, maculâque und ad utrumque marginem, elytris viginti-duobus ovatis ornatis; his a squamis auratis, vel aureo-cupreis, effectis.*

Var. β . *differt elytris maculis octodecim ornatis.*

Var. γ . *differt elytris maculis sexdecim ornatis.* Long. corp. lin. $10\frac{1}{2}$;— $7\frac{3}{4}$.

Sp. 2. *Pachyrhynchus gemmatus*, W. *Niger vel cupreus, lævis; capite suprâ maculis duabus, thorace suprâ tribus, infrâ duabus, et elytris sexdecim (duabus apud suturam) ornatis; his maculis a congerie squamarum metallicè splendentium effectis; squamis centralibus nitidè viridibus, circumgyrantibus aureo-rubris, et indè ocellos efficientibus.*

Var. β . *differt elytris maculis viginti-duobus ornatis.*

Sp. 3. *Pachyrhynchus perpulcher*, W. *Niger, lævis; thorace maculis (subocellatis) suprâ quatuor, subtùs duabus, elytris octodecim ornatis; his a squamis metallicè viridibus et cupreis effectis.*

Sp. 4. *Pachyrhynchus Cumingii*, W. *Splendidè cupreus; elytris levitè punctato-striatis; rostro notâ transversâ basali, capite maculis oblongis tribus, harum und interoculari, undâ utrinque suboculari; thorace lineis marginalibus, et suprâ lineis tribus, et undâ transversâ interruptâ, notato; elytris linedâ marginali, lineisque duabus longitudinalibus dorsalibus, necnon linedâ transversâ per medium excurrente, atque lineis duabus abbreviatis et ad angulos basales et ad subapicales; his lineis maculisque pallidè cyaneo-viridibus.* Long. corp. lin. $6\frac{3}{4}$.

Sp. 5. *Pachyrhynchus speciosus*, W. *Splendidè cupreus, vel niger; elytris punctato-striatis; capite lineis tribus longitudinalibus notatis; thorace annulis tribus elongato-ovatis; elythro utroque fasciis duabus transversis humeralibus ad marginem elytrorum externum confluentibus et prope suturam; duabus centralibus et ad suturam et ad marginem externum ductis necnon confluentibus; et linedâ aream-semilunarem circumdante apicali, ornato.*

Sp. 6. *Pachyrhynchus decussatus*, W. *Ater, linedâ transversâ apud thoracis medium et pone hanc lineis tribus longitudinalibus, necnon margine externo aureo-viridibus; elytris, linedâ centrali transversâ, lineis quatuor ad basin longitudinalibus, et pone transversam, lineis duabus longitudinalibus, his lineam parvulam incurvam lateralem emittentibus; lineis omnibus sic et marginibus elytrorum splendidè aureo-viridibus.* Long. corp. lin. $7\frac{1}{2}$.

Sp. 7. *Pachyrhynchus phaleratus*, W. *Ater, linedâ transversâ apud thoracem medium, ad utrumque latus in duos ramulos dividâ spatium inæquale circumdantes; pone transversam, linedâ centrali longitudinali; elytris linedâ mediâ transversâ, lineis duabus ad basin longitudinalibus, et pone transversam tribus longitudinalibus; his*

- sic et marginibus externis et basalibus, aureo-viridibus.* Long. corp. lin. $7\frac{3}{4}$.
- Sp. 8. *Pachyrhynchus Schœnherri*, W. *Splendide cupreus; capite maculis tribus, earum una interoculari, una utrinque suboculari; thorace nitido, dorso binotato, ad latera lineis duabus; elytris octodecim punctis, (duobus apud suturam) ornatis; his notis, lineis maculisque pallide viridibus.* Long. corp. lin. $5\frac{1}{2}$.
- Sp. 9. *Pachyrhynchus Erichsoni*, W. *Æneus; capite maculis tribus, earum una interoculari, una utrinque suboculari; thoracis dorso binotato, lateribus bimaculatis; elytris maculis sexdecim ornatis; maculis omnibus colore flavo.* Long. corp. lin. 6.
- Sp. 10. *Pachyrhynchus Eschscholtzii*, W. *Ater, nitore violaceo; thorace maculis duabus; elytris maculis quatuor rotundatis ad basin; sex ad medium, sex prope apicem, duabusque ad apicem, albescentibus.*
- Sp. 11. *Pachyrhynchus striatus*, W. *Ater; elytris profunde punctato-striatis; capite macula inter oculos; thorace supra trimaculato; elytris duodecim maculatis; maculis aureis; illis elytrorum ad basin quatuor, et ad apicem quatuor elongatis, ad medium quatuor, scilicet duabus externis rotundatis, et duabus dorsalibus transversis.* Long. corp. lin. 6.
- Sp. 12. *Pachyrhynchus roseomaculatus*, W. *Niger; elytris distincte punctato-striatis; capite macula inter oculos; thorace supra trimaculato; elytris undecim maculatis; his maculis roseis; plerisque oblongis; macula una suturali obcordata.* Long. corp. lin. $6\frac{1}{3}$.
- Sp. 13. *Pachyrhynchus jugifer*, W. *Ater; capite macula viridi inter oculos, et altera utrinque sub oculos; thorace medio linea transversa, et pone hanc linea longitudinali a transversa usque ad marginem posticum thoracis excurrente, his e squamis purpureo-aureis effectis, quibus latera quoque thoracis obtecta sunt; elytris squamis purpureo-aureis indutis, area majuscula rotundata prope scutellum, et fascia transversa in medio elytrorum, ad latera et ad suturam dilatata, necnon linea per suturam a fascia transversa ad notam apicalem currente, his notis denudatis.*
- Sp. 14. *Pachyrhynchus reticulatus*, W. *Niger; capite lineis tribus longitudinalibus notatis; thorace elytrisque lineis splendide viridibus vel cupreis areas polygonas circumdantibus reticulate ornatis.*
- Sp. 15. *Pachyrhynchus multipunctatus*, W. *Ater; capite maculis tribus, earum una interoculari, una utrinque suboculari; thorace nitido, dorso binotato, ad latera lineis duabus; elytris punctis plurimis ornatis; his lineis punctisque viridibus.*
- Sp. 16. *Pachyrhynchus inornatus*, W. *Ater; elytris leviter punctato-striatis.*
- Sp. 17. *Pachyrhynchus moniliferus*, Esch.
- Sp. 18. *Pachyrhynchus chlorolineatus*, W. *Ater; thorace medio*

lined transversá, et pone hanc lined longitudinali; elytris lined transversá centrali, lineis duabus longitudinalibus, et lined marginali, his viridibus, nonnunquàm splendidè aureis, vel cupreo-viridibus.

Sp. 19. *Pachyrhynchus orbifer*, W. *Niger; thorace medio lined transversá, et pone hanc lined longitudinali a transversá usque ad marginem posticum thoracis excurrente, his e squamis cæruleo-viridibus effectis; elytris squamis cæruleo-viridibus indutis, areis rotundatis denudatis.*

This species I suspect, as well as that described under the name *P. chlorolineatus*, is but a local variety of *P. moniliferus*. In specimens from some localities, the scales forming the markings are of a beautiful golden green colour. I have before me individuals in which the scales on the elytra arrange themselves into bands—one at the base of the elytra, one in the middle, and one near the apex; the first and last of these bands are curved. Such specimens make an approach to the *P. moniliferus*, but differ in the bands being much broader. Again, there are specimens connecting this intermediate variety more closely on the one hand with the *P. orbifer* (where the elytra are covered with scales with the exception of three circular areas arranged in a transverse line near the base of the elytra, three a little behind the middle, and one near the apex), and on the other with the *moniliferus*.

Sp. 20. *Pachyrhynchus rugicollis*, W. *Ater; thorace distinctè rugoso-punctato, punctis squamis viridibus ornatis; elytris rufopiceis, vel piceis, levitèr punctato-striatis et ad apicem quasi squamis viridibus pulverulentis.*

April 5th.—W. W. Saunders, Esq., President, in the Chair.

The President exhibited various splendid species of moths from Northern India.

Mr. Bainbridge exhibited several species of insects found in cigars, including a small species of *Latridius* and a species of *Haltica*, which Mr. Waterhouse stated to be very similar to a unique British species. Some masses of excrement, apparently of a *Lepidopterous larva*, were also found. Mr. Gutch stated that it was cheroots and not Havannah cigars that were attacked by these insects.

Mr. Westwood exhibited some singular Coleopterous insects from the collection of Mr. Melly, including *Acropis tuberculifera*, Burm., and a new genus allied to *Lyctus* with remarkable antennæ, &c.

Some larvæ of *Trogosita Caraboides* were forwarded to the Society by Messrs. Norton, Kilburn, and Co., which were found among some China raw silk recently imported from Manilla, to which they had caused considerable injury, the silk having been eaten or gnawed in many places, by which the value of some bales was depreciated to the extent of twenty-five per cent.

An extract was read from a letter addressed to Mr. Westwood by Mr. James Duncan, relative to a silk cocoon which is attached by a long peduncle to the twigs of trees in India, and suggesting the

great advantages which would result, in a commercial point of view, from the discovery of a chemical solvent for the gum, by which the silk threads of the cocoons of various large species of exotic moths are glued together. Mr. Westwood added, that the cocoon of the Indian *Phalena Paphia*, described and figured by Roxburgh in the Linnæan Transactions, agreed with the description given by Mr. Duncan.

A memoir was read by Mr. G. R. Waterhouse, containing descriptions of various Coleopterous insects brought from the Philippine Islands by Mr. Cuming.

Section LAMELLICORNES.

MYCTERISTES, Laporte, Hist. Nat. Ins. ii. p. 162. [Philistina, MacL.]

M. Cumingii, W. *Viridis nitore resplendente; elytris pedibus et corpore subtùs flavescente lavatis; capite ♂ cornu erectum exhibente ad apicem latum et submarginatum; thorace convexo, anticè porrecto in cornu validum ad apicem bifidum suprâ caput pendens; tibiis ♂ scopulâ pilorum subtùs instructis et externè haud denticulatis**. Long. corp. ♂ lin. $12\frac{1}{2}$, ♀ lin. $9\frac{1}{2}$.

Mr. Waterhouse considers this insect as allied to the genus *Macronota* (and not to *Goliathus*), approaching nearest to *M. Rhinophyllus*, and that it forms the type of a distinct subgenus (especially from the difference in the structure of the feet), for which the name of *Phædimus* is proposed.

Lomaptera cupripes, W. *Viridis, elytrorum marginibus pedibusque cupreis*. Long. corp. lin. 14–15.

“This approaches very nearly *L. valida*, G. and P., but the club of the antennæ is black and not yellow, as in that species.”

Lomaptera nigro-ænea, W. *Nigro-ænea, corpore subtùs, antennis pedibusque nigris*. Long. corp. 1 unc.

“Like *L. cupripes* in form, but of a smaller size and æneous black colour.”

Macronota Philippinensis, W. *Nigra; antennis, palpis, tibiis tarsisque piceo-rubris; capite lineis duabus, thorace lineis tribus, scutello elytrorumque maculis 5 lineisque duabus auratis*.

Macronota nigro-cærulea, W. *Nigra nitida, indistinctè cæruleo-tincta*. Long. corp. 1 unc. 1 lin., lat. 6 lin.

“This species is remarkable for its uniform bluish black colour, and is rather larger than *M. Diardi*, G. and P.”

Section LONGICORNES.

Family SAPERIDÆ ?

DOLIOPS, W. *Caput quam thorace angustius, paulo productum et posticè cylindraceum, oculi reniformes, palpi mediocres articulis terminalibus oblongo-ovalibus et subtruncatis; antennæ 11-articulatæ breves et graciles articulo basali elongato, 2do brevi, 3tio perlongo, et ad apicem dilatato articulis reliquis mediocribus. Thorax sub-*

* Figures of both sexes of this fine insect, with details, have been published by Mr. Westwood in the ‘Arcana Entomologica,’ pl. 1.

globosus posticè constrictus. Elytra perbrevia valdè convexa, humeris prominulis. Pedes paulo grandes femoribus in medio crassescens, tibiis latis compressis; tarsi brevibus latis.

Doliops curculionoides, W. Obscurè viridi-æneus, indistinctè cærulescens, capite lined albâ longitudinali; elytris 14 guttis flavescenti-albis adspersis corporeque subtùs eodem colore maculato.*
Long. corp. lin. $5\frac{1}{2}$.

The resemblance which this insect bears in size, form and colouring to a species of *Pachyrhynchus* (one of the *Curculionidæ*), which Mr. Cuming found in the same locality, is remarkable. From the short ovate form of the body it seems at first sight allied to *Dorcadion*, but in the form of the head, slender antennæ and feet, it appears to approach certain *Saperdæ*, and especially to *Colobothea*.

Mr. Cuming, who was present, stated that the ladies in Manilla keep specimens of the splendid *Agestrata luzonica* in cages, feeding them upon sugar-cane.

ZOOLOGICAL SOCIETY.

Jan. 26, 1841.—W. Yarrell, Esq., Vice-President, in the Chair.

Prof. Owen read his description of a new genus and species of sponge, which he proposes to name *Euplectella Aspergillum*.

“Mr. Cuming has entrusted to me for description,” says the author, “one of the most singular and beautiful, as well as the rarest of the marine productions with which his researches in the Philippine Islands have enabled him to enrich the zoological collections of his native country. This production is, however, a member of the very lowest class of the animal kingdom, if even it be permitted to rank in that division of organized nature. After repeated examination and much reflection, I can arrive at no other conclusion than that the object about to be described is the skeleton or framework of a species of sponge belonging to that division of the class called Horny, in opposition to the calcareous and siliceous groups, and to the Alcyonoid family. It is a hollow, cylindrical, slightly conical, and gently curved case or tube, resembling a delicate cornucopia, with the apex removed. It measures eight inches in length, two inches across the base, and one inch and a quarter across the apex, which is truncated. The base or wider aperture of the tube is sub-elliptical, and is closed by a cap of coarse and somewhat irregular network, gently convex externally, the circumference of which is divided from the walls of the cylinder by a thin projecting plate, standing out like a ruff or frill. This marginal plate varies in breadth from one to three lines. The parietes of the circular cone consist also of a network of coarse fibres, but these exhibit the greatest regularity of disposition, and intersect each other at definite and nearly equal distances throughout the course of the cone. They consist of longitudinal, transverse, and oblique fibres, the latter being of two kinds, winding spirally round

* A figure of this remarkable insect has been published by Mr. Westwood in the ‘*Arcana Entomologica*,’ pl. 15, fig. 1.

the cylinder, but in opposite directions. The strongest fibres are the longitudinal and transverse ones, which are arranged at intervals of about a line and a half, and mark out regular square spaces of the same diameter: these spaces are kept of pretty equal size throughout the cone, from the circumstance of the longitudinal fibres diminishing in number as the cone decreases in size; the mode of diminution is not, however, by abrupt termination, but by the gradual convergence and final interblending of two contiguous longitudinal fibres, and the regularity of the interspaces is therefore disturbed at the intervals of such converging fibres. The fibre resulting from this union of two fibres bears a proportionate thickness to the additional material entering into its composition. The nature of such material is demonstrated at the apex of the cone by the resolution of the longitudinal fibres into their component filaments, each of them dividing at about two-thirds of an inch from their extremity into a fasciculus or pencil of extremely delicate, stiff, glistening, elastic threads, resembling the finest hairs of spun glass. The transverse fibres, in like manner, are resolved at the truncated apex of the cone into their component filaments, which intersect those proceeding from the longitudinal fibres, as well as similar pencils from the oblique filaments, the whole forming an irregular silky tuft, which almost closes the apical aperture of the cone.

“ The longitudinal fibres are external to the transverse ones, to which they are connected by both the spiral fibres, and by smaller and less regular intersecting fibres at the angles of the squares; the area of each square is thus reduced more or less to a circular form: at about one or two inches from the apex, these connecting reticulate fibres begin to rise in the form of narrow ridges from the general surface of the network, and sooner on the convex than on the concave side of the bent cone. These ridges at first are short and interrupted; they are then more extended, but irregular in their course, some being transverse, others undulated or curved; but as they approach the base of the cone they are continued into broader ridges, which follow, with more or less regularity, the course of the oblique spiral fibres; the broadest of these ridges would measure two lines and a half. Their structure presents an extremely fine and irregular network, disposed, for the most part, in two plates, which converge as they recede from the general wall of the cone, and terminate in a sharp and well-defined edge. The component fibres of these reticulations, like those of the main network, are resolved into the fine silky filaments above mentioned. The fibres of the coarse irregular network which closes the basal aperture of the cone, and which constitutes the main characteristic of this Alcyonoid sponge, appear to be directly continued from, and, as it were, to include all those which enter into the composition of the longitudinal, transverse and oblique fibres of the wall of the cone; the frill-like ridge above described defining the line of transition from the one to the other. The inner surface of the reticulate parietes of the cone is even; not interrupted by any ridges or processes like those on the outer surface. The number of the longitudinal filaments at the base of the

cone is 60; that at the smaller end, where they begin to resolve themselves into their constituent filaments, is 30. The diameter of the longitudinal fibres is about $\frac{1}{40}$ th of an inch; that of the transverse fibres is somewhat less. The oblique fibres, where they are most regular, average $\frac{1}{60}$ th of an inch; the longitudinal fibres, where they begin to resolve themselves into their component filaments, expand in the direction of a line passing to the centre of the cone, and not in the direction of the plane of its circumference; maintaining, in the latter respect, nearly the same breadth to their entire unraveling; whilst in the other dimension they equal one line in breadth before they are wholly decomposed. Small portions of a finely reticulate plate were loosely attached to some parts of the internal surface. The fibres of these pieces consisted of minute filaments, irregular in their course, branching, anastomosing, and sending off abrupt processes like thorns. The component filaments of the parietal fibres are of two kinds; the one simple, cylindrical, and smooth; the others barbed at pretty regular distances through their whole course, like the hair of certain caterpillars. I have also observed a long filament, simple at one extremity, and becoming barbed at the other. They consist of material like the dried gluten of marine plants, containing a small proportion of azote, and burning away to a charry residuum.

“If the basal aperture of the cone were open, the resemblance to many of the beautiful reticulate Alcyonoid sponges would be very close: its closure by the reticulate convex cap, in the present instance, establishes the generic distinction; and in the exquisite beauty and regularity of the texture of the walls of the cone the species surpasses any of the allied productions that I have, as yet, seen, or found described.”

A letter from G. T. Vigne, Esq. was read. In this letter, at the request of the Society's Curator, Mr. Vigne furnishes the following list of Birds constituting part of a collection this gentleman had formed during his travels in Thibet, Cashmere, &c.

Aquila Bonelli, Gould. Cashmere and Lower Himalaya.

Buteo — ? Cashmere.

Accipiter fringillarius, Ray. Cashmere.

Falco biarmicus? Temm. } Common in the plains under the Alpine
— *Chicquera*? Lath. } Panjab.

Athene Cuculoïdes, Gould. In the Alpine Panjab.

Caprimulgus Asiaticus, Lath. Plain of Attok.

Merops Apiaster, Linn. Cashmere and Persia.

Alcedo Bengalensis, Gmel. Cashmere.

— *Smyrnensis*. Alpine Panjab.

Phænicornis brevirostris, Vig. *Ib.*

Muscipeta castanea, Temm. *Ib.*

Turdus atrogularis, Temm. *Ib.*

Oriolus galbuloides, Gould. *Ib.*

Ixos leucogenys (*Brachypus leucogenys* of Hardwick and Gray's 'Indian Zoology'). Cashmere.

Note.—An allied species, differing in having red instead of yellow under the tail, is found in the plains of India.

- Ianthocincla variegata*, Gould. Alpine Panjab.
Petrocincla saxatilis, Vig. *Ib.*
 ——— *Pandoo*, Sykes. *Ib.*
Enicurus maculatus, Vig. Cashmere.
Phœnicura leucocephala, Vig. *Ib.*
Motacilla lugubris, Pall. *Ib.*
Coccothraustes Icteroides, Vig. Alpine Panjab.
Pastor Mahrattensis. *Ib.*
Garrulus lanceolatus, Vig. *Ib.*
Fregilus graculus, Cuv. Himalaya tops; Little Thibet.
Nucifraga hemispila, Vig. Cashmere.
Cuculus micropterus, Steph. Cashmere.
Dendrocopus Himalayanus. Alpine Panjab.
Picus nuchalis, Wagl. *Ib.*
Chrysoptilus squamatus, Swains. *Ib.*
Bucco grandis, Linn. *Ib.*
Tichodroma phœnicoptera, Temm. Cashmere, Alpine Panjab, and
 Little Thibet.
Columba leuconota, Vig. Thibet mountains.
Turtur auritus, Ray. Alpine Panjab.
Phasianus Stacei, Vig. Chumba.
 ——— *albocristatus*, Vig. Alpine Panjab.
 ——— *Pucrasia*, Vig. *Ib.*
Lophophorus Impeyanus, Vig. Cashmere and Himalaya.
Tetraogallus Nigellii, Gray. Snow range, Cashmere and Little Thibet.
Pterocles arenarius, Temm. Plains of Panjab.
Francolinus vulgaris, Gould. Alpine Panjab and Indus.
Perdix Chukar, Lath. Thibet.
Coturnix Sinensis. India and Panjab.
Ardea cinerea, Lath. Panjab.
Ibis Falcinellus, Cuv. Little Thibet.
Scolopax rusticola, Linn. Dodah, near Cashmere,
 Note.—A second species, nearly allied to the *Scolopax major*, Linn.,
 is found in Cashmere.
Totanus ———? Thibet.
Parva Sinensis, Lath. Cashmere.
Querquedula Crecca, Steph. *Ib.*
Fuligula Nyroca, Steph. Little Thibet.

Mr. Vigne's letter also contains the following notes, relating to a species of Hare from Little Thibet, which was exhibited to the Meeting, and which he had presented to the Society:—

“The Hares of Little Thibet, which is a barren country, are found almost exclusively within, or within reach of, sandy valleys, through which a stream flows, creating on its flat banks just verdure enough for them to feed upon. They lie in forms, under rocks and stones; sometimes, when pursued, will take to any natural hollows beneath them, and are occasionally, and, in fact, frequently, sheltered by the thick bushes of *Tartarian furze*, with which the valleys of Little Thibet abound, more or less. They do not burrow, but scratch away a deep form under a stone or rock. In some respects this species re-

sembles the Alpine Hare, but the latter has a small ear, whilst the present animal has a very large, broad, and open ear. I never heard that these Hares were gregarious, excepting from the necessity of seeking the same places in quest of food, and those being few and far between. The nature of the country would prevent any migration, such as that of the Alpine Hares.

“ I never heard it utter any peculiar cry, and should think it not unlikely that the varieties said to exist in Tartary by Bewick, and to *whistle* sharply, like the chirping of a sparrow, must be the large Drun (?) or Thibetian Marmot, of which Jacquemont says he received a skin, and of which I and Dr. Falconer also have seen plenty. I had the skeleton of one, but unfortunately lost it.”

Mr. Vigne moreover observes, that there are no Hares in Cashmere, though it is a country which appears to be particularly fitted for them; neither are there any gray or black Francolins, though all are found within four or five days' march of the Valley.

The Hare exhibited, Mr. Waterhouse observed, was an undescribed species*, and he proceeded to characterize it under the name of

LEPUS TIBETANUS. *Lep. cinereus, pilis flavescenti-albo nigroque annulatis; abdomine albo; pedibus suprâ sordidè albis, subtùs sordidè flavescenti-fuscis, pilis densis indutis; caudâ mediocri, albâ, suprâ nigricante; auribus longis, ad apicem nigricantibus: nuchâ sordidè albâ, indistinctè fulvo-lavâtâ.*

	unc.	lin.
Longitudo ab apice rostri ad caudæ basin . . .	18	0
———— caudæ	4	6
———— tarsi	5	0
———— auris	4	6
———— ab apice rostri ad basin auris	3	8

The Thibet Hare, compared with most other species of the genus, is most remarkable for its pale grayish colouring, and the almost total absence of brown or yellow tints in its fur. On the upper parts of the body the fur is of a pale gray hue next the skin; the hairs are blackish beyond the middle, and at the point, and broadly annulated with white or cream colour near the point; but interspersed with the ordinary fur on this part of the body are numerous hairs which are white at the base, though annulated like the others on the apical portion. The fur on the chest is also pale gray at the base, but externally it has a faint fulvous hue, though it might almost be described as dirty white, and the *occiput* and back of the neck are of the same hue. On the belly the fur is white, even next the skin. The legs and feet are almost white; a slight ashy tint is observable on the outer side of the hinder pair; they are rather densely clothed with fur, and that on the under side is of a yellowish-brown hue, but not very dark. The ears are very large, and well clothed with hairs; on the outer part, in front, these hairs have the same colouring as those on the back of the animal, but on the hinder part they are white, or nearly so, and the apical portion of the ear is broadly margined with black.

* At p. 234 we give Mr. Hodgson's description of this animal from the Journal of the Asiatic Society, dated February 1841.

The skull, compared with that of the common Hare, differs, in being much smaller, and proportionally narrower; the upper incisors have the groove rather more near the middle of the tooth. Following are the principal dimensions of the skull:—

	in.	lin.
Total length	3	4
Width	1	7 $\frac{1}{8}$
Width between orbits	1	0
Length of nasal bones	1	5
Width at base	0	8
Length of bony palate	1	2 $\frac{1}{3}$

Mr. Gould exhibited and characterized a new species of *Himantopus*, which he had received from New Zealand.

HIMANTOPUS NOVÆ ZELANDIÆ. *Him. fuliginoso-niger, dorso, alis caudâque nitore virescente tinctis. Exempla, fronte, loris, mento, collo anticè, et ad latera, sic et pectore crissoque albis, nonnunquam obveniunt.*

The whole of the plumage sooty black, with the exception of the back, wings and tail, which are glossed with green: examples sometimes occur with the forehead, lores, chin, front and sides of the neck, chest, and under tail-coverts white; bill black; feet pink-red.

Total length, 16 inches; bill, 3; wing, 9 $\frac{1}{4}$; tail, 3 $\frac{1}{2}$; tarsi, 3 $\frac{1}{4}$.

This bird is interesting, not so much for its beauty, but as adding another species to the very limited genus *Himantopus*, of which, until lately, only one was known. Mr. Gould regretted that no other information accompanied the specimens than that they were killed at Port Nicholson. From the great difference in their colouring it might be supposed that they are distinct, but he inclines to believe that they are either the result of age or season; in all probability the black plumage is that of summer.

MICROSCOPICAL SOCIETY.

At a meeting of the Microscopical Society, held October 20th, Richard Owen, Esq., F.R.S., President, in the Chair. The Secretary, Mr. John Quekett, read a paper by himself, "On the Minute Structure of Bat's Hair." After alluding to the great beauty of the hairs of different animals, as developed by means of the microscope, the author described briefly the formation and mode of growth of hairs generally, and stated that his attention was directed to those of the Bat tribe, in consequence of having on more than one occasion used a knife to separate them from the skin; and on examination subsequently it was seen that the curious markings on their surfaces, which render these hairs so interesting, were destroyed in some parts, but were still present in others. By repeating the scraping process it was found that minute scale-like bodies were detached, which were not unlike in shape the scales on the wing of a butterfly, but were very much smaller, and presented no trace of striæ on their surfaces; and it was on the arrangement of the scales, and on their

being more prominent in some species than in others, that the beautiful appearance of Bat's hair depended. The scales might be procured either by scraping the hair with a knife in a direction from the apex towards the root, or more easily by pressing them between glasses previously moistened by the breath. Many of them appeared to terminate in a quill, like that observed on the butterfly's scale; some few were flat, whilst others were curved, so as to fit the shaft of the hair, and presented a serrated edge. The scales were absent near the bulb, but abounded in all parts of the shaft situated above the skin; and when removed from many of the larger hairs, the fibrous nature of the shaft and its cellular interior were well displayed. He spoke of the hair of an Indian Bat, of which a small portion had been given him by Mr. Powell, in which, without any preparation, the scales could be beautifully seen, both detached and still adherent to the shaft; and he was led, from repeated observation, to consider a Bat's hair as composed of a shaft invested with scales, which are developed to a greater or less degree, and vary in the mode of their arrangement in the different species of these animals; and concluded by stating that Bats resembled quadrupeds principally in their mode of reproduction, and birds in their mode of progression, but resembled both in the structure of their hair.

Some discussion followed the reading of the paper, in which the President and others took a part.

MISCELLANEOUS.

Cyclostoma elegans, Lam., an Irish Shell.—In my catalogue of the Land and Freshwater Mollusca of Ireland, published in the 6th vol. of the 'Annals,' it is considered that there are not sufficient data for ranking *Cyclostoma elegans* with our indigenous species. I have lately seen a number of specimens of this shell, and am now enabled to announce it as such, although not so satisfactorily as could be wished. These were found by Mrs. W. J. Hancock washed up by the tide upon the strand at Mullaghmore, near Bundoran, on the western coast. Whether the *Cyclostoma* tenants the neighbouring sand-hills, or is brought from a distance by rivers to the ocean and then cast upon the beach where the examples here mentioned were obtained, is yet to be learned. Fully a hundred of them were collected in one day.

In reference to a *Cyclostoma* which Dr. Turton stated had been found in the west of Ireland, I troubled Mr. Jeffreys with some queries, which were replied to as follows, in a letter dated Swansea, Aug. 30, 1841:—"The specimen of *Cyclostoma productum* (Turton) which I received from Mr. Clark as forming part of the late Dr. Turton's collection is well figured in his 'Manual,' but it does not agree with the figure or description of *C. sulcatum* of Draparnaud, to which Dr. Turton doubtfully referred it. I have no doubt that it is an exotic shell, and that Mr. Gray's account of it (in his edition of 'Turton's Manual') is correct."—WM. THOMPSON.

Belfast, Sept. 1841.